MISCELLANEOUS NOTES

finally slightly curved or straight, stout, initially increases in diameter towards root, terete, becoming tetrangular and grooved near the foliar cotyledons, glabrous. Cotyledons 2 (exhibit up and down nyctinastic movement but do not fold like leaves - also see Pijl 1952: 295, 302), opposite, foliar, 2.3-2.9 x 1.6-2.0 cm, yellowish-green at first, finally green, wither through yellow to brown at 4th leaf stage, slightly fleshy, elliptic, sometimes slightly asymmetric, entire, obtuse at apex, more or less so at base, glabrous, 5-nerved (the young foliar cotyledons appear to be 3 or 4-nerved), middle one bifurcates near apex; petioles c. 2 mm long, green, flattened above, semi-lunar in T.S., with prominent pulvinus at distal end; interpetiolar region with hair-like outgrowths. Stem green, erect, slender, slightly angled, somewhat zigzag at nodes, at first pubescent, finally glabrescent. Leaves alternate, 2.0-3.2 x 3.0-4.0 cm, 1st leaf not much smaller than others, green, suborbicular to broadly ovate, 9 (1st leaf) -11 (2nd to 4th leaves)nerved (nerves clearly visible to the naked eye except those near extreme leaf-base), bifid c. 1/5 their length into subacute to broadly obtuse lobes at apex, mucronate between lobes, shallowly cordate at base, upper surface glabrous, lower surface pubescent mainly along nerves and with fine pits within areolae of reticulations; pits not so

closely situated as in mature leaves, each pit with a hyaline inflated trichome (see Tucker *et al.* 1984), which finally turns yellowish to rusty; petioles 1.3-2.4 cm long, green, herbaceous, dorsally grooved, with deep green pulvinus at both ends, pubescent, finally glabrescent. Stipules 2, minute, green, free, lateral, narrowly ovate, falcate, pubescent, deciduous.

ACKNOWLEDGEMENTS

I am grateful to Dr. (Mrs.) V.S. Ghate, Agharkar Research Institute, Pune for sending me some seeds collected from Nimbachi Wadi, near Kashele in April 1998 and to Dr. N.D. Paria, Botany Department, Calcutta University for his help and encouragement. I am grateful to the anonymous reviewer for his constructive suggestions. Dr. L.B. Chaudhary, National Botanical Research Institute, Lucknow and Dr. W. Greuter, Botanischer Garten und Botanisches Museum, Berlin kindly provided me with photocopies of literature.

November 15, 2001 S. BANDYOPADHYAY Botanical Survey of India, P.O. Botanic Garden, Howrah 711 103, West Bengal, India.

References

- DAS, D.C. (1996): Seedling morphology of some Indian Leguminosae with reference to taxonomy. Ph.D. Thesis (unpubl.). University of Calcutta, India.
- DAS, D.C. & N.D. PARIA (1999): Seedling morphology in identification of some Indian species of *Bauhinia* L. (Caesalpiniaceae). *Feddes Repert.* 110(5-6): 375-379.
- DUKE, J.A. & R.M. POLHILL (1981): Seedlings of Leguminosae. *In*: Advances in Legume Systematics Part 2: 941-949, (Eds.: Polhill, R.M. & P.H. Raven).

Royal Botanic Gardens, Kew.

- PIJL, L. VAN DER (1952): The leaf of *Bauhinia*. Acta Bot. Neerl. 1(2): 287-309.
- TROUP, R.S. (1921): The silviculture of Indian trees. 2: 337-783. Clarendon Press, Oxford.
- TUCKER, S.C., S.R. RUGENSTEIN & K. DERSTINE (1984): Inflated trichomes in flowers of *Bauhinia* (Leguminosae: Caesalpinioideae). *Bot. J. Linn. Soc.* 88: 291-301.

39. SYZYGIUM NEESIANUM ARN. (MYRTACEAE) — AN ADDITION TO THE INDIAN FLORA

(With one text-figure)

During a visit to Kodayar hills, Kanyakumari district, Tamil Nadu, an interesting specimen of a tree species of *Syzygium* Gaertner (Family Myrtaceae) was collected. The characters

MISCELLANEOUS NOTES



Fig. 1: Syzygium neesianum Arn.; A. Twig, B. Flower bud, C. Corolla, D. Flower without corolla, E. Stamen, F. Pistil with calyx, G-H. Ovary (L.S. & T.S.) of this species do not agree with those of any known species of the genus from India. The tree was identified as *Syzygium neesianum* Arn., an endemic species of Sri Lanka (Ashton 1981). The present discovery is of great phytogeographical interest, and the specimens from Kodayar hills are identical to the Sri Lankan specimen housed in the Madras Herbarium (MH), Botanical Survey of India (Southern Circle), Coimbatore. A short description with illustration is provided to facilitate identification.

Syzygium neesianum Arn., L. Nova. Acta. Phys: Med. Acad. Caes. Teop. Carol. Nat. Cur. 18: 335. 1836; Thw., Enum Pl. Zeyl. 117: 1843; Alston in Trimen, Handb. Fl. Ceylon 6: 116. 1931; Ashton in Dassanayake & Fosberg, Rev. Handb. Fl. Ceylon 2: 442. 1981. Eugenia neesiana Wt., Ic. Pl. Ind. Or. t. 533. 1843; Duthie in Hook.f., Fl. Br. India 2: 493. 1879.

Small tree, to 6 m; branchlets terete, glabrous. Leaves opposite-decussate, oblonglanceolate, 5-8 x 2-3.5 cm, coriaceous, glabrous, chocolate brown when dry, base subacute to subcordate, margin entire, slightly recurved, apex obtusely acuminate; lateral nerves many, subparallel; petiole 3 mm long, thick. Flowers 4 mm across, white, in terminal corymbose cymes, to 5 cm long; peduncle 3-10 mm long, terete; rachis 4-angled; pedicel up to 2 mm long; bract inconspicuous. Calyx-tube up to 3 mm long, glabrous; lobes 4, short, obscure. Petals 4, orbicular, up to 2 mm long, calyptrate, fugaceous. Stamens many, unequal, filaments filiform, 2-4 mm, cream; anthers ovate, c. 0.5 mm. Ovary inferior, globose, to 2 mm long, 2-loculed; 3-6 ovules in each, with central axile placentae; style

filiform, subulate, to 4 mm long; stigma simple, acute at apex.

Specimens examined: INDIA: Tamil Nadu, Kanyakumari district: Kodayar (upper) Manickam & Murugan XCH 12454; Kerala — Idukki district: Meenmutti, Mohanan, MH acc. No. 151501; Quilon district, Naduvanoor — Kadavu path, Mohanan MH Acc. No. 113376; Quilon district: way to Thenmalai, Mohanan MH Acc. No. 117379; Trivandrum district: Bonnacard, Mohanan MH Acc. no. 117381. SRI LANKA: MH 60885 (s.no. L.P. 735).

Note: The specimens collected from Kerala and kept in MH, are misidentified as *Syzygium caryophyllatum* (L.) Alston, but they belong to *S. neesianum* Arn. due to the presence of leaves with sub-cordate base and, acuminate apex and calyx with 4 lobes.

ACKNOWLEDGEMENTS

We are grateful to the UGC for financial assistance. We thank Dr. R. Gopalan and Dr. V. Chelladurai for their suggestions and critical evaluation of the manuscript. We are grateful to the Field Director, Kalakad-Mundanthurai Tiger Reserve, India for permission to undertake the field studies.

March 30, 2001	C. MURUGAN
	V.S. MANICKAM
	V. SUNDARESAN
Centre for Biodiversity and Biotechnology,	
St. Xavier's College (Autonomous),	
	Palayamkottai 627 002,
	Tamil Nadu, India.

40. SOME NEW RECORDS OF ASTERACEAE FOR THE STATE OF MAHARASHTRA

While carrying out intensive plant explorations in southwestern Maharashtra, three members of Family Asteraceae were collected, which on critical study were identified as *Cyathocline manilaliana* Raju and Raju, *Laggera* alata (D. Don) Sch.-Bip. Ex. Oliver and Wedelia glauca (Ort.) S.F. Blake. Genus Cyathocline Cass. and genus Laggera Sch.-Bip. ex Koch. are represented by three species each and genus Wedelia Jacq. is represented by five species in